automatically performing the retraining step is a fixed amount of time that has elapsed since a last retraining step has been performed.

66. (New) The automatic method of claim 64, wherein the predetermined criteria for automatically performing the retraining step is when a threshold number of documents have been added, deleted, or moved in the collection and any combination thereof.

67. (New) The automatic method of claim 64, wherein the predetermined criteria for automatically performing the retraining step is when the system has reached an idle state. is either updating the classier or performing bookkeeping operations whenever messages are added to folders, removed from folders, or moved from one folder to another.

68. (New) The automatic method of claim 11, wherein incremental retraining the classifier includes an instant strategy for incrementally retraining the classifier.

REMARKS

By the present amendment, claims 12 and 34-36 are canceled, without prejudice, claims 11, 13-21, 23-33, and 37-63 are pending, claims 11 and 61 have been amended and claims 64-68 have been added to further define the present invention.

By the Office Action, dated May 21, 2002, claims 11-21, 23-36, 44-45, 47-51, 60-63 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lewak et al. (U.S. Patent No. 5,544,360) in view of Herz (U.S. Patent No. 6,029,195).

With respect to claims 11 and 61, the Examiner has stated it would have been obvious to

one of ordinary skill in the art at the time of the invention to apply the method of Herz to the method of Lewark, because of Herz's taught the advantage of updating profiles, providing a way to keep a user profile updated so that it dynamically responds to changing interests.

To establish a prima facie case of obviousness, at the very least, the prior art references must teach or suggest all the claim limitations. In addition, the teaching or suggestion to make the claimed combination must both be found in the prior art and not based on applicant's disclosure (see, e.g., MPEP 2141, 2413, 2143.03).

Claims 11 and 61 have been amended to further define the invention, and therefore, Applicants respectfully submit that the above arguments are believed to be moot.

Claims 11 and 61 recite, *inter alia, incrementally retraining the classifier to adapt to modifications of the collection, wherein the incremental retraining is performed using a lazy strategy for incrementally retraining the classifier.* The claimed invention provides numerous advantages by using the lazy strategy to update the classifier. For instance, it can take a significant fraction of a second to update the classifier before viewing the next mail message. Therefore, the lazy strategy makes it possible to perform the classifier update during a moment when the update is less likely to hurt performance, for example, when the user's machine is relatively idle. (see page 19, lines 6-20).

The Examiner correctly notes that Lewak does not specifically teach a method of incrementally retraining the classifier.

While Herz is related to a computer filing system for accessing files and data according to user-designated criteria and automatically updating a users target profile interest summary on a continuing basis, Applicants respectfully submit that Herz does not cure the deficiencies of

Lewak nor does Herz teach or suggest an automated method comprising the step of *incrementally retraining the classifier to adapt to modifications of the collection, wherein the incremental retraining is performed using a lazy strategy for incrementally retraining the classifier,* as recited in claims 11 and 61 of the present invention. Therefore, claims 11 and 61 are believed to be patentably distinct and nonobvious over the cited references.

Claims 13-21, 23-33, and 37-60 depend from claim 11, and claims 62-63 depend from claim 61. Therefore, the dependent claims are allowable for at least the same reasons as the independent claims 11 and 61.

Claims 64-68 have been added to further define the invention.

In view of the foregoing remarks and amendments, a request for continued examination of the case is respectfully requested. Early and favorable consideration of the case is respectfully requested.

Respectfully submitted,

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IN THE CLAIMS (Marked-up version)

Please cancel claims 12 and 34-36 without prejudice.

11.(Thrice amended) An automated method of assisting a user with the task of categorizing electronic documents into a collection, comprising the steps of:

classifying, with a classifier, a document to obtain a plurality of most likely categorical labels;

deriving a plurality of categorizations shortcuts from the plurality of most likely categorical labels;

displaying, to the user, a representation of the plurality of most likely categorical labels;

receiving , from the user, a selection of one or more of the most likely categorical labels representative of the document to be categorized within a collection;

labeling the document within the collection with one or more of the selected categorical labels; and

incrementally retraining the classifier to adapt to modifications of the collection, wherein the incremental retraining is performed using a lazy strategy for incrementally retraining the classifier.

61. (Twice amended) A program storage device, readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for automatically assisting a user with the task of categorizing an electronic document into a collection, the method comprising the steps of:

classifying, with a classifier, a document to obtain a plurality of most likely categorical labels;

deriving a plurality of categorizations shortcuts from the plurality of most likely categorical labels;

displaying, to the user, a representation of the plurality of most likely categorical labels;

receiving , from the user, a selection of one or more of the most likely categorical labels representative of the document to be categorized within a collection;

labeling the document within the collection with one or more of the selected categorical labels; and

incrementally retraining the classifier to adapt to modifications of the collection, wherein the incremental retraining is performed using a lazy strategy for incrementally retraining the classifier.